

Title (en)
VARIABLE FOCUS MICROLENS

Title (de)
MIKROLINSE MIT VARIABLER BRENNWEITE

Title (fr)
MICROLENTILLE A FOCALE VARIABLE

Publication
EP 1769272 B1 20111123 (EN)

Application
EP 04749239 A 20040720

Priority
SG 2004000217 W 20040720

Abstract (en)
[origin: US8111466B2] A microlens chip comprises a variable focus fluidic microlens and actuator. The actuator varies the pressure in a fluidic channel in the microlens chip which is coupled to an aperture opening containing the microlens. Applying an electric field to the actuator creates changes in fluid pressure in the fluidic channel, which in turn changes the radius of curvature (i.e., focal length) of the fluidic microlens.

IPC 8 full level
G02B 3/14 (2006.01); **G02B 1/06** (2006.01); **G02B 7/04** (2021.01); **G02B 26/00** (2006.01)

CPC (source: EP KR US)
G02B 3/00 (2013.01 - KR); **G02B 3/12** (2013.01 - KR); **G02B 3/14** (2013.01 - EP KR US)

Citation (examination)
MYINT H H ET AL: "Water droplet lens microscope and microphotographs", PHYSICS EDUCATION, INSTITUTE OF PHYSICS PUBLISHING, BRISTOL, GB, 1 January 2001 (2001-01-01), pages 97 - 101, XP007918421, ISSN: 0031-9120

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006009514 A1 20060126; AT E534925 T1 201111215; CN 101031828 A 20070905; EP 1769272 A1 20070404; EP 1769272 A4 20090520; EP 1769272 B1 20111123; JP 2008507724 A 20080313; JP 4897680 B2 20120314; KR 100931075 B1 20091210; KR 20070030957 A 20070316; TW 200604560 A 20060201; TW I292048 B 20080101; US 2008019015 A1 20080124; US 2011122504 A1 20110526; US 7898742 B2 20110301; US 8111466 B2 20120207

DOCDB simple family (application)
SG 2004000217 W 20040720; AT 04749239 T 20040720; CN 200480043649 A 20040720; EP 04749239 A 20040720; JP 2007522467 A 20040720; KR 20077003176 A 20040720; TW 94124193 A 20050715; US 201113015534 A 20110127; US 57231707 A 20070119